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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---|------------------------------------|
| 10/537,718 | 06/03/2005 | Kambiz Iranpour | 14.0229-PCT-US | 5019 |
| <div>7590 05/31/2007 Jeffrey E Griffin WesternGeco Intellectual Property Department P O Box 2469 Houston, TX 77252-2469</div> | | | <div>EXAMINER PIHULIC, DANIEL T</div> | |
| | | | <div>ART UNIT 3662</div> | <div>PAPER NUMBER</div> |
| | | | <div>MAIL DATE 05/31/2007</div> | <div>DELIVERY MODE PAPER</div> |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/537,718

Applicant(s)

IRANPOUR, KAMBIZ

Examiner

Daniel T. Pihulic

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7, 10, 11, 15-18, 21-24, 38 and 39 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 8, 9, 12, 13, 19, 20, 25-37 and 40-42 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20070116.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
3. Claims 7, 10, 11, 21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "The method" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "The method" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation "at least one second velocity meter" in line 1. This is considered confusing since there is no first velocity meter limitation in the claim.

Claim 21 recites the limitation "a second velocity meter" in line 1. This is considered confusing since there is no first velocity meter limitation in the claim.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 14-18, 23, 24, 38 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by US5428581 . The US5428581 reference discloses the utilization of a known method of determining the position of a moving target by (see column 1, lines 9-20) generating a positioning signal from a source, receiving the positioning signal with a receiver positioned along a seismic cable, providing a (computed) Doppler shifted positioning signal corresponding to the positioning signal (see column 1, lines 14-16), determining a propagation time delay from source to receiver using the generated positioning signal, the received positioning signal and the computed Doppler shifted positioning signal (see column 1, lines 13-20) the correlation step between received signals and several copies of Doppler shifted signals as recited in claims 1 and 14.

With regards to claims 24 and 39 the set-up of look-up tables which are used by the signal processing unit and which implicitly must exist in the known method as described in US5428581 (see column 1, lines 14-16: "... copies of the signals sent out, each copy corresponding to a different Doppler shift").

With regards to claims 2, 3, 4, 15-18, 23 and 38 are disclosed in US5428581 (see column 1, lines 9-20).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Pihulic whose telephone number is 571-272-6977. The examiner can normally be reached on Monday and Wednesday through Friday from 5:30 a.m. to 4 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza, can be reached on 571-272-6979.

The fax phone numbers for the organization where this application or proceeding is assigned are: 571-273-8300 for official responses, and
571-273-6977 for unofficial communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the telephone number 800-786-9199.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197.

**/Daniel Pihulic/
Daniel T. Pihulic
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T.C. Art Unit 3662**